

**AMENDMENTS TO THE CLAIMS**

*Please replace all previously pending claims with the following listing of claims:*

1.     **(Currently amended)**       A method for treating a disorder in which TNF $\alpha$  activity is detrimental comprising administering to a subject an effective amount of a TNF $\alpha$  inhibitor in a low dose ~~therapy~~ of 0.01 – 0.1 mg/kg, such that the disorder is treated.
2.     **(Original)**       The method of claim 1, wherein the disorder is arthritis.
3.     **(Original)**       The method of claim 2, wherein the disorder is rheumatoid arthritis.
4.     **(Currently amended)**       The method of any one of claims 2 ~~and or~~ 3, wherein symptoms selected from the group consisting of bone erosion, cartilage erosion, inflammation, and vascularity, are treated.
5.     **(Previously presented)**       The method of any one of claims 1-3, wherein the TNF $\alpha$  inhibitor is an anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, or a TNF $\alpha$  fusion protein.
6.     **(Previously presented)**       The method of claim 5, wherein the TNF $\alpha$  fusion protein is etanercept.
7.     **(Canceled)**
8.     **(Currently amended)**       A low dose method to alleviate symptoms associated with a disorder in which TNF $\alpha$  activity is detrimental, comprising administering a low dose of 0.01 – 0.1 mg/kg of a TNF $\alpha$  inhibitor to a subject suffering from said disorder, such that the symptoms are treated.
9.     **(Original)**       The method of claim 8, wherein the disorder is arthritis.
10.    **(Original)**       The method of claim 9, wherein the disorder is rheumatoid arthritis.
11.    **(Currently amended)**       The method of any one of claims 9 ~~and or~~ 10, wherein symptoms are selected from the group consisting of bone erosion, cartilage erosion, inflammation, and vascularity.

12. **(Previously presented)** The method of any one of claims 8-10, wherein the TNF $\alpha$  inhibitor is an anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, or a TNF $\alpha$  fusion protein.
13. **(Previously presented)** The method of claim 12, wherein the TNF $\alpha$  fusion protein is etanercept.
14. **(Canceled)**
15. **(Currently amended)** A method for treating arthritis comprising administering to a subject an effective amount of a TNF $\alpha$  inhibitor in a low dose ~~therapy~~ of 0.01 – 0.1 mg/kg, such that the arthritis is treated.
16. **(Original)** The method of claim 15, wherein the arthritis is rheumatoid arthritis.
17. **(Currently amended)** The method of ~~either~~ any one of claims ~~claim~~ 15 or 16, wherein arthritis is treated by alleviating symptoms selected from the group consisting of bone erosion, cartilage erosion, inflammation, and vascularity.
18. **(Currently amended)** The method of any one of claims ~~claim~~ 15 or 16 wherein the TNF $\alpha$  inhibitor is an anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, or a TNF $\alpha$  fusion protein.
19. **(Previously presented)** The method of claim 18 wherein the TNF $\alpha$  fusion protein is etanercept.
20. **(Canceled)**
21. **(Currently amended)** A low dose method for treating symptoms associated with arthritis comprising administering to a subject ~~a low dose of~~ an effective amount of a TNF $\alpha$  inhibitor in a low dose of 0.01 – 0.1 mg/kg, such that the symptoms are alleviated.
22. **(Previously presented)** The method of claim 21, wherein the arthritis is rheumatoid arthritis.

23. **(Currently amended)** The method of any one of claims 21 ~~and~~ or 22, wherein the symptoms are selected from the group consisting of bone erosion, cartilage erosion, inflammation, and vascularity.
24. **(Original)** The method of claim 23, wherein the symptoms are further selected from the group consisting of joint distortion, swelling, joint deformation, ankylosis on flexion, and severely impaired movement.
25. **(Currently amended)** The method of any one of claims 21 or 22, wherein the TNF $\alpha$  inhibitor is an anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, or a TNF $\alpha$  fusion protein.
26. **(Previously presented)** The method of claim 25, wherein the TNF $\alpha$  inhibitor fusion protein is etanercept.
27. **(Canceled)**
28. **(Currently Amended)** A method of sequestering TNF $\alpha$  into complexes in a subject suffering from a disorder in which TNF $\alpha$  activity is detrimental, by administering a low dose of 0.01 – 0.1 mg/kg of a TNF $\alpha$  inhibitor to the subject.
29. **(Original)** The method of claim 28, wherein the serum level of TNF $\alpha$  is higher than the serum level of TNF $\alpha$  in a subject not suffering from a disorder in which TNF $\alpha$  activity is detrimental.
30. **(Previously presented)** The method of claim 28, wherein the anti-TNF $\alpha$  inhibitor is an anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, or a TNF $\alpha$  fusion protein.
31. **(Previously presented)** The method of any one of claims 1, 8, or 15, wherein the TNF $\alpha$  inhibitor is administered with an additional therapeutic agent.
32. **(Previously presented)** The method of claim 5, wherein the anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, is either infliximab or D2E7.
33. **(Previously presented)** The method of claim 12, wherein the anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, is either infliximab or D2E7.

34. **(Previously presented)** The method of claim 18, wherein the anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, is either infliximab or D2E7.
35. **(Previously presented)** The method of claim 25, wherein the anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, is either infliximab or D2E7.
36. **(Previously presented)** The method of claim 30, wherein the anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, is either infliximab or D2E7.
37. **(Previously presented)** The method of claim 30, wherein the TNF $\alpha$  fusion protein is etanercept.
38. **(Canceled)**
39. **(Canceled)**
40. **(Previously presented)** The method of claim 5, wherein the anti-TNF $\alpha$  antibody, or an antigen-binding portion thereof, is human.
41. **(Previously presented)** The method of claim 40, wherein the anti-TNF $\alpha$  antibody, or antigen-binding portion thereof, dissociates from human TNF $\alpha$  with a  $K_D$  of  $1 \times 10^{-8}$  M or less and a  $K_{off}$  rate constant of  $1 \times 10^{-3} \text{ s}^{-1}$  or less, both determined by surface plasmon resonance, and neutralizes human TNF $\alpha$  cytotoxicity in a standard *in vitro* L929 assay with an  $IC_{50}$  of  $1 \times 10^{-7}$  M or less.
42. **(Currently amended)** A low dose method for treating rheumatoid arthritis in which TNF $\alpha$  activity is detrimental comprising administering to a subject a low dose of 0.01 – 0.1 mg/kg of a human TNF $\alpha$  antibody, or an antigen-binding portion thereof, such that the disorder is treated.
43. **(Previously presented)** The method of claim 36, wherein symptoms selected from the group consisting of bone erosion, cartilage erosion, inflammation, and vascularity, are treated.

44. **(Previously presented)** The method of claim 36, wherein the anti-TNF $\alpha$  antibody, or antigen-binding portion thereof, dissociates from human TNF $\alpha$  with a  $K_d$  of  $1 \times 10^{-8}$  M or less and a  $K_{off}$  rate constant of  $1 \times 10^{-3} \text{ s}^{-1}$  or less, both determined by surface plasmon resonance, and neutralizes human TNF $\alpha$  cytotoxicity in a standard *in vitro* L929 assay with an  $IC_{50}$  of  $1 \times 10^{-7}$  M or less.
45. **(Previously presented)** The method of claim 36, wherein the anti-TNF $\alpha$  antibody, or antigen-binding portion thereof, is D2E7.
46. **(Canceled)**
47. **(Canceled)**
48. **(Currently amended)** A low dose method of improving symptoms in the joints of a subject having arthritis comprising administering to the subject a low dose of 0.01-0.1 mg/kg of a human anti-TNF $\alpha$  antibody, or antigen-binding portion thereof, ~~comprising 0.01-0.1 mg/kg~~ such that at least one symptom selected from the group consisting of inflammation, cartilage erosion, bone erosion, and vascularity is improved.
49. **(Previously presented)** The method of claim 44, wherein the anti-TNF $\alpha$  antibody, or antigen-binding portion thereof, is D2E7.